Type	Drugs	Action	Uses	Adverse effects	Contraindication
HMG-COA REDUCTASE INHIBITORS "STATINS"	1. Lovastatin 2. Atorvastatin 3. Fluvastatin 4. Pravastatin 5. Simvastatin 6. rosuvastatin	• Inhibiting HMG CoA reductase • ↓↓ cholesterol (LDL & Triglyceride) • ↑↑ LDL Receptors • ↓↓↓↓LDL most effect	1. hypercholesterolemia by decrease LDL↓↓ 2. After AMI 3. Patients at high risk of coronary heart disease	1. Liver: Liver function disorders (elevated levels of transaminase) 2. Muscle: skeletal muscle weakness & pain common. Myopathy & even rhabdomyolysis occur rarely(CPK levels)	1. Pregnancy 2. Lactating women 3. Children and teenagers • Drug Interaction : Increase warfarin levels↑↑
Nicotinic acid	1. Niacin (Vitamin B3)	• Reduces lipolysis in adipose tissues • ↓↓ VLDL & LDL	1. Familial hyperlipidemias	**1. Flushing ,pruritis** most common prevented by taking aspirin prior to niacin 2. Liver dysfunction 3. Hyperglycaemia 4. Hyperuricaemia 5. Nausea & vomiting	
Fibric acid derivatives	1. Fenofibrate 2. Gemfibrozil 3. Clofibrate	• Increase lipolysis of lipoprotein triglyceride via Lipoprotein lipase (LPL) • Reduces lipolysis in adipose tissues • ↓↓ VLDL & LDL • ↓↓↓↓triglyceride most effect	1. Hypertriglyceridemia 2. mixed hyperlipidemia	1. Mild GI disturbances (dyspepsia, abdominal pain) 2. Myositis, muscle weakness or tenderness, myopathy, rhabdomyolysis 3. Gallstones) increase biliary cholesterol excretion)	1. Pregnancy 2. lactation , 3. patients with severe hepatic & renal dysfunction & gallbladder disease
Bile acid sequestrants (resins)	1. Cholestyramine 2. Colestipol 3. Colesevelam	• Lowering the bile acid concentration by Resin/bile acid complex • ↓↓ cholesterol (LDL & Triglyceride)	1. drugs of choice in treating hyperlipidemias 2. Relieve pruritus caused by accumulation of bile acids in patients with biliary obstruction	1. Unpleasant taste & GI disturbances (constipation, diarrhea, flatulence, steatorrhea) 2. Interference with drug absorption as digoxin, thiazides, warfarin, aspirin	
Cholesterol absorption inhibitors	1. Ezetimibe	• Selectively inhibits intestinal absorption of dietary and biliary cholesterol in the small intestine	1. Useful in hypercholesterolemia when a statin alone is inadequate		

Type	Drugs	Action	Route of administration	Uses	Adverse effects
Class I A Phase 0 (Na channel blockers)	Disopyramide	• ↑↑ Increase action potential duration	1. Orally 2. IV	1. PVC (premature ventricular contractions) 2. Ventricular arrhythmias (after AMI) 3. SVT of Wolf Parkinson White syndrome	1. Anti-muscarinic effects 2. Decrease blood pressure
Class I A Phase 0 (Na channel blockers)	Quinidine	• ↑↑ Increase action potential duration		1. Atrial fibrillation or flutter 2. Resistant SVT (Supraventricular Tachycardia(3. Occasionally in ventricular tachycardia	1. Hypotension 2. heart failure
Class I A Phase 0 (Na channel blockers)	Procainamide	• ↑↑ Increase action potential duration	1. Initially by IV infusion then orally	1. Ventricular arrhythmias after AMI	1. Hypotension 2. prolonged therapy may cause drug-induced SLE
Class I B Phase 0 (Na channel blockers)	Lignocaine	• ↓↓ Decrease action potential duration	1. Only IV (infusion or injection)	1. PVC (premature ventricular contractions) 2. Ventricular tachycardia 3. Ventricular arrhythmias after AMI	1. Hypotension, 2. sleepiness , 3. confusion 4. convulsions
Class I B Phase 0 (Na channel blockers)	Phenytoin	• ↓↓ Decrease action potential duration		1. Digitalis-induced arrhythmias	
Class I B Phase 0 (Na channel blockers)	Mexiletine	• ↓↓ Decrease action potential duration	1. orally	1. Ventricular arrhythmias after AMI	1. Hypotension 2. Tremor 3. Ataxia 4. dysarthria
Class I C Phase 0 (Na channel blockers)	Flecainide	• Negligible effects on action potential duration		1. PVC (premature ventricular contractions) 2. ventricular tachycardia 3. SVT (Supraventricular Tachycardia)	

Type	Drugs	Action	Route of administration	Uses	Adverse effects
Class II Phase 4 (Beta-blockers)	1. **Propranolol** 2. **Esmolol**			1. APC (atrial premature contractions) 2. SVT (Supraventricular Tachycardia) 3. Atrial fibrillation	
Class III Phase 1,2,3 (K channel blockers)	**Amiodarone**	• lengthen refractoriness • prolong action potential duration • Increases refractory period	1. Once daily orally 2. by injection	1. Atrial fibrillation 2. Ventricular tachycardia 3. SVT (Supraventricular Tachycardia) 4. WPWS arrhythmias	1. Corneal microdeposit (photophobia) 2. Photosensitivity 3. Thyroid disorders 4. Pneumonitis 5. pulmonary fibrosis 6. hepatitis
Class III Phase 1,2,3 (K channel blockers)	**Bretylium**	• lengthen refractoriness • prolong action potential duration • Increases refractory period	1. IV	1. In resistant ventricular arrhythmias after AMI like VF & VT	
Class IV Phase 2 (Ca channel blockers)	**Verapamil**	• Direct –ve inotropic effects & -ve chronotropic effect • Blocking influx of calcium through L-type channels		1. SVT (Supraventricular Tachycardia) 2. Atrial fibrillation	1. Headache 2. Constipation, 3. Hypotension, 4. Bradycardia • Not used with beta-blockers • Contraindicated in heart failure and after AMI
Other	**Adenosine**	• slows & inhibits AV nodal conduction	1. IV	1. SVT (Supraventricular Tachycardia)	1. Bronchospasm(avoided in asthma) 2. flushing 3. chest pain
Other	**Digoxin**	• Inhibiting ATPase (Na-pump) in cardiac cells • Indirect –ve chronotropic effect through increasing vagus tone	1. Orally 2. IV	1. Atrial fibrillation 2. Arrhythmias as AF & SVT 3. Heart failure particularly when associated with arrhythmia likely AF • **Smaller doses** are used in: Elderly, renal disease, hypothyroidism, in the presence of hypokalemia	1. Digoxin toxicity include: • Cardiac effects: arrhythmias and heart block • GI effects: nausea and vomiting. • CNS effects: headache, confusion, nightmares, psychosis, coloured vision